**ASSIGNMENT-1**

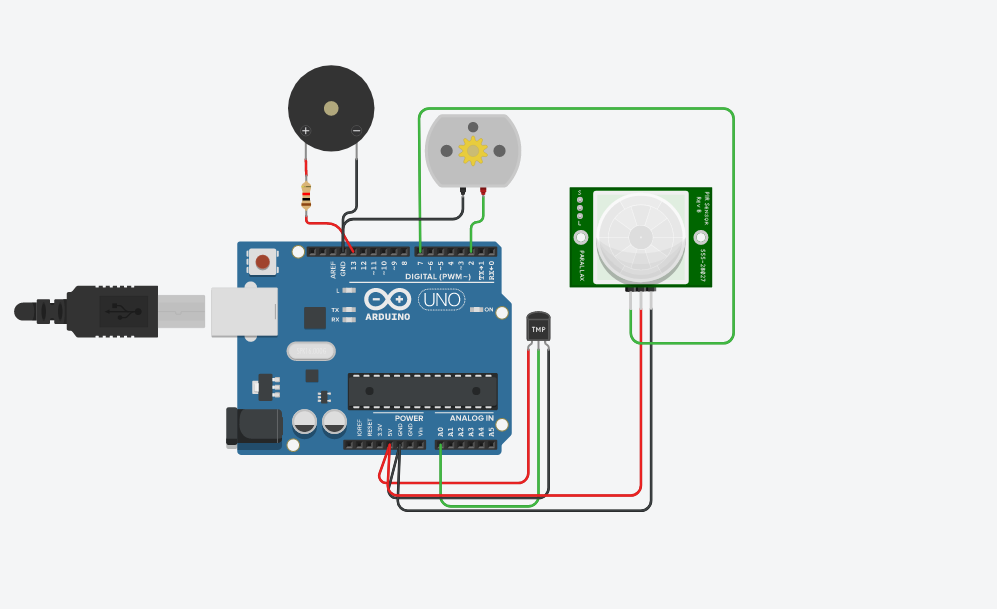
**TITLE:** INTERFACING PIEZO ALARM WITH PIR AND TEMPERATURE SENSOR

**Team ID :** PNT2022TMID15139

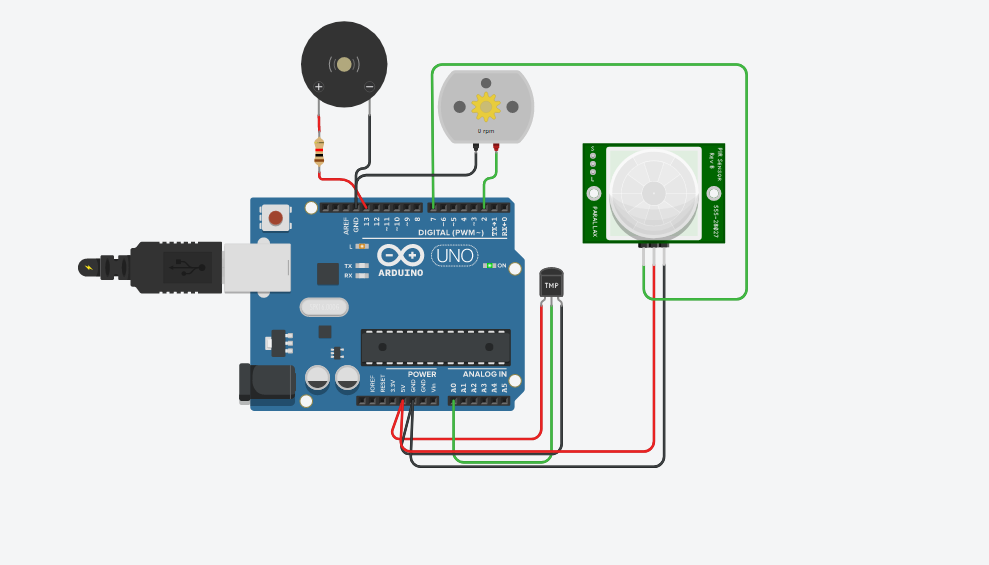
**TEAM LEADER** : DILIP KUMAR

**CIRCUIT DIAGRAM:**

**BEFORE SIMULATION:**

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**AFTER SIMULATION:**

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**CODE:**

void setup()

{

Serial.begin(9600);

pinMode(13,INPUT);

pinMode(12,OUTPUT);

}

void loop()

{

double data=analogRead(A2);

double n=data/1024;

double volt=n\*5;

double off=volt-0.5;

double temperature=off\*100;

int motion=digitalRead(13);

for(int freq=4;freq<=5;freq++)

{

if(temperature>=60)

{

Serial.println("Temperature is above 60");

tone(12,freq);

delay(100);

}

else

{

Serial.println("Temperature is below 60");

noTone(12);

}

}

for(int freq=2;freq<=3;freq++)

{

if(motion==1)

{

Serial.println("Motion Detected");

tone(12,freq);

delay(200);

}

else

{

Serial.println(" No Motion");

noTone(12);

}

}

}